

GNETOV, V. M.

"Semiconductor Heat-sensitive Resistors and the Study of Their Thermal Operating Conditions as Applied to Conditions for Microwave Power Measurement." Cand Tech Sci Leningrad Inst of Precision Mechanics and Optics, Leningrad, 1954. (RZhFiz, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

GNEUSHEV, M.N.

An additional video amplifier. Avtom., telem. i sviaz' 6
no.8:38 Ag '62. (MIRA 15:8)

1. Nachal'nik laboratorii radiosvyazi i televideniya Moskovskoy
dorogi.
(Amplifiers (Electronics)) (Railroads--Electronic equipment)

GNEUSHEV, N.M.; OVINNIKOV, A.I., starshiy inzh.

Radio communications for signalmen during track maintenance work.
Avtom., telem.i sviaz' 6 no.1:31-32 Ja '62. (MIRA 15:3)

1. Nachal'nik laboratorii radiosvyazi i televideniya Moskovskoy
dorogip (for Gneushev).
(Railroads--Communication systems)

GNEUSHEV, P. I.

~~NEW~~/Mining Equipment
Training

Apr 48

"For New Machines - Qualified Machinists,"
P. I. Gneushev, Engr, 1 p

"Ugol'" No 4

Stresses importance of workers' receiving
adequate instruction in use of new mining
machinery.

1/49796

GNEUSHEV, P.I., inzh.

Introducing new type of roof bolting in development mining. Bezop.
truda v prom. 5 no.4:1-3 Ap '61. (MTRA 14:3)

1. Institut gornogo dela im. A.A.Skochinskogo Akademii nauk SSSR.
(Mine roof bolting)

GNEUSHEV, P.I., inzh.

Precast reinforced concrete supports for mine workings. Ugol'.
prom. no.1:40-43 Ja-F '62. (MIRA 15:8)

1. Institut gornogo dela im. A.A.Skochinskogo.
(Mine timbering)

GNEUSHEV, P.I.

Support of workings at the Dzerzhinskii and other Krivoy Rog Basin
mines. Fiz. mekh. svoiz., dav. i razr. gor. porod. no.2:207-223 '63.
(MIRA 17:1)

GNEUSHEV
GNEUSHEV, V.I. [Hneushev, V.I.], inzh.-mekhanik.

Poultry section of the "Zoria komunizmy" Collective Farm. Mekh. sii'.
hosp. 9 no.1:25 Ja '58. (MIRA 11:2)
(Poultry houses and equipment)

GNEUSHEV, V.I., inzh.-mekhanik [Gneushev, V.I.]

The PDU-4 milking machine. Mekh. sil'. hosp. [9] no.5:25-27 My '58.
(MIRA 11:6)

(Milking machines)

ACC NR: AP6036758

SOURCE CODE: UR/0020/66/171/001/0081/0083

AUTHOR: Gneushev, V. N.; Lyashchenko, B. G.; Matovarov, V. A.; Novak, L. I.; Sarkayan, V. V.

ORG: none

TITLE: Neutron diffraction investigation of radiation-induced ordering in Ni_3Mn and $Ni_3F_{1/2}Mn_{1/2}$ alloys

SOURCE: AN SSSR. Doklady, v. 171, no. 1, 1966, 81-83

TOPIC TAGS: neutron diffraction, neutron irradiation, fast neutron, ordered alloy, nickel alloy, manganese containing alloy

ABSTRACT: The tests were made on polycrystalline samples irradiated in a type SM reactor in an integral fast-neutron flux 3.5×10^{17} neut/cm² at a temperature 60 -- 70°. The neutron diffraction pictures were taken 56, 74, and 87 or more days following the irradiation. Both samples exhibited ordering action of the reactor irradiation, with (001) and (011) lines appearing for the nickel-iron-manganese compound, and also smeared (012) and (112) lines for the nickel-manganese alloy. The latter two lines indicate that long-range atomic order is also produced. The degrees of long-range order, determined from the ratios of the intensities of the superstructure lines (001) and (011) to the intensity of the main line (111), differed by almost a factor or two.

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UDC: 539.2.22

ACC NR: AP6036758

This difference is attributed to the anisotropy of the distribution of the radiation defects. It is concluded from the results that ordering of a previously disordered Ni₃Mn alloy is feasible, and that this phenomenon depends on the conditions under which the experiments were made. This explains also discrepancies and the results obtained by others. The authors thank V. I. Klimenkov for valuable advice. This report was presented by Academician G. V. Kurdyumov 28 January 1966. Orig. art. has: 1 figure and 1 table.

SUB CODE: 20/ SUBM DATE: 07Jun65/ ORIG REF: 002/ OTH REF: 005

Card 2/2

ACC NR: AP6029111

SOURCE CODE: UU/0048/68/030/006/0972/0974

AUTHOR: Gnoushov, V. N.; Lyashchenko, B. G.; Novak, L. I.; Sarkasyan, V. V.

ORG: none

TITLE: Multiple component superstructures of variable composition in magnetic alloys based on Ni₃Fe and Ni₃Mn *Report, All-Union Conference on the Physics of Ferro- and Antiferromagnetism held 2-7 July 1965 in Sverdlovsk*

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 6, 1966, 972-974

TOPIC TAGS: neutron diffraction, ordered alloy, iron nickel alloy, nickel alloy, manganese alloy, chromium alloy, ~~magnetic~~ alloy

ABSTRACT: Investigations of single phase solid solutions of 3d metals have shown that formation of superstructures of variable composition is characteristic of cross sections of the phase equilibrium diagrams of such three-component alloys as Ni₃(Fe, Mn), Ni₃(Fe, Cr), (Ni, Co)₃Fe and others, so that there was reason to assume that ordering should obtain in the superstructures based on Ni₃Fe, Ni₃Mn and FeCo. Accordingly, in the present work there were investigated by neutron diffraction analysis alloys having the compositions Ni₃(Fe, Mn), Ni₃(Fe, Cr), Ni₃(Mn, Cr), (Ni, Co)₃Mn, and (Ni, Co)₃Fe_{0.5}Mn_{0.5}. It is feasible to detect formation of long-range order in experiments on polycrystalline specimens of these alloys. About 21 specimens were prepared by induction furnace melting of technical grade components under slag with intro-

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APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R000615510012-0

Card 2/2

SELIVANOV, A.I., red.; GNEUSHEV, V.N., inzh., retsenzent; KHOMENKO, G.P., inzh., retsenzent

[Album of technological charts for a continuous repair of the KDM-46 and KDM-100 engines in specialized plants]
Al'bom tekhnologicheskikh kart dlia potochnogo remonta dvigatelei KDM-46 i KDM-100 na spetsializirovannykh predpriyatiyakh. Moskva, Mashinostroenie, 1964. 282 p. (MIRA 18-12)

1. Perovo. Gosudarstvennyy vsesoyuznyy nauchno-issledovatel'skiy tekhnologicheskiy institut remonta i ekspluatatsii mashinno-traktornogo parka.

GNEUSS, G.

A modern block steam engine. Wiad naft 6 no.6:133-136 Je.'60.
(Steam engines) (ERAI 9:10)

18/1140
18.32.1

1.1148
S/133/62/000/011/005/005
A054/A127

AUTHORS: Rakhshtadt, A.G., Docent, Meshcherionova, O.N., Candidates of
Technical Sciences, Gnevko, A.I., Soshnikov, S.A., Engineers

TITLE: The effect of boron and titanium on the mechanical properties and
ductility of the new 55 XГР (55KhGR) and 55СГ2Р (55SG2R) spring
steels

PERIODICAL: 'Stal', no. 11, 1962, 1041 - 1047

TEXT: At the MBTY im. Baumana (MVTU im. Bauman) and TsNIIChM tests were
carried out to improve the quality of 60 С2 (60S2), 55 С2 (55S2) and 55 XГ (55KhG)
spring steels by the addition of boron (0.003 - 0.01%) and titanium (0.06 - 0.24%).
The new grades were melted in a 50-kg magnesite-lined induction furnace in the
following composition (55KhGR = A', A"; 55S2GR = B', B"; 55S2 = C for control):

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The effect of boron and.....

S/133/62/000/011/005/005
A054/A127

Heats CANTOK							Heats CANTOK						
	C	Mn	Si	Cr	Ti	B		C	Mn	Si	Ti	B	
A'	1 0.54	1.02	0.35	1.4	0.06	0.003	S'	1 0.54	1.7	1.25	0.06	0.003	
	2 0.54	1.10	0.32	1.2	0.06	0.006	2	0.55	1.65	1.38	0.06	0.006	
	3 0.55	1.05	0.37	1.3	0.06	0.01	3	0.55	1.7	1.40	0.06	0.01	
A"	1 0.55	1.08	0.24	1.3	—	0.003	B"	1 0.54	1.7	1.08	0.06	—	
	2 0.55	1.1	0.30	1.5	0.06	—	2	0.54	1.5	1.05	0.10	0.003	
	3 0.55	1.04	0.32	1.30	0.09	0.003	3	0.54	1.6	1.1	0.12	0.003	
	4 0.55	0.99	0.32	1.35	0.16	0.003	4	0.54	1.65	1.15	0.24	0.003	
	5 0.55	0.94	0.36	1.30	0.24	0.003							
HC	—	0.53	1.0	1.8	0.3	—	—						

Prior to adding boron the steel was reduced by aluminum, then titanium was added. Tests carried out to study the hardenability of the new grades showed that an addition of 0.003% boron greatly improved this property. Addition of up to 0.06% titanium to steels containing 0.003% boron improves the hardenability still further. When more than 0.06% titanium was added, however, this property of the steel deteriorated, most probably due to the crystallizing effect of titanium compounds leading to the transformation of the supercooled austenite phase. The addition of more than 0.1% titanium weakens the tendency to grain growth in the

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S/133/62/000/011/005/005
AD54/A127

The effect of boron and.....

steel structure, on account of the capping effect of titanium compounds that are not dissolved in the austenite phase, not even at high (up to 1150°C) temperatures. The optimum addition both with regard to grain growth and hardening properties are 0.003% boron and 0.06% titanium. The addition of 0.06 - 0.12% titanium slightly reduces the strength of the test grades. The 55SG2R grade, containing various amounts of boron and titanium has a higher ductility than the conventional 55S2 grade. The threshold of ductility will be attained with 0.003% boron and 0.1 - 0.16% titanium. Optimum ductility for the 55SG2R grade will be obtained with annealing at 350°C, whereas for the 55KhGR grade at 300°C. In the 55SG2R grade the value of stresses reaches the maximum simultaneously with the maximum value of ductility; at the same time the microplastic friction starts developing. Spring steels containing boron and titanium show a lower tendency to decarburization (in 55KhGR grade: 0.01 mm, in 55SG2R: 0.003 mm, whereas in the 55S2 grade: 0.12 mm). The test grades proved superior to the conventional spring steels also in view of relaxation stability, which was tested under uni-axial extension at a stress of $\sigma_0 = 120$ kg/mm². To obtain a high degree of relaxation stability, the steel must contain sufficient chrome. In general, the optimum amounts of boron and titanium added depend on the steel composition. Greater amounts of

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Card 3/4

GNEVKO, D.G., inzh.

In reference to the article "Organizational problems of dispatcher control in power systems." Elek.sta. 29 no.11:90-91 N '58.

(MIRA 11:12)

(Electric power distribution)

GNEVKO, D.G., ZAROZHNY, A.M.

Experience in using a closed-loop network in a low-voltage power distribution system. Elek.sta. 33 no.12+40-42 D '62. (MIRA 1612)
(Electric power distribution)

FEDOSENKO, R.Ya., kand. tekhn. nauk (Moskva); REYNVALD, O.A. (Reinvalds, O.)
(Riga); GNEVKO, D.G., inzh. (Minsk); ZAROZHNYY, A.M., inzh. (Minsk);
VOYTKO, A.M., inzh. (Minsk); FEDOROV, Ye.Ya., inzh. (Minsk);
AYZENBERG, B.L., doktor tekhn. nauk (Leningrad)

Protection of closed-loop networks. Elektrichestvo no.2:
83-89 F '65. (MIRA 18:3)

GREBENNIK, L.I.; RYABOKON', N.A.; GNEVKOVSKAYA, T.V.

Determination of epiline in drugs. Med. prom. 14 no.7:39-42 Je '60.
(MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut im. S. Ordzhonikidze.

(HAIR, REMOVAL OF)

GREBENNIK, L.I.; GNEVKOVSKAYA, T.V.; VELIKODVORSKAYA, G.A.

Comparative data on the metabolism of nicotinic and isonicotinic acids in the rat organism. Farm. i toks. 23 no. 5:436-439 S-0 '60. (MIRA 13:12)

1. Otdel khimioterapii (zav. - prof. G.N. Pershin) Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta imeni S. Ordzhonikidze.

(NICOTINIC ACID) (ISONICOTINIC ACID)

GREBENNIK, L.I.; GNEVKOVSKAYA, T.V.; CHURNOV, G.I.

Metabolism of vanillin as a p-aminovazide ingredient. Vop.
med. khim. 9 no.2:127-133 Mr.-p '63. (MIRA 17:8)

1. Otdel khimioterapii Vsesoyuznogo nauchno-issledovatel'skogo
khimiko-farmatsevticheskogo instituta imeni Ordzhonikidze i
Institut tuberkuleza AMN SSSR, Moskva.

GNEVKOVSKIY, O., prof. (Praga)

Clinical symptom of beginning avascular necrosis of the coxofemoral joint. Ortop.travm.i protex. 20 no.8:32-37 Ag '59. (MIRA 12:11)
(HIP, diseases)

CNEVKOVSKIY, V.G. inzh.

Transportation characteristics of wheeled tractors. Mekh.i elek.
sots.sel'khoz. 19 no.5:52 '61. (MIRA 14:10)

1. Melitopol'skiy institut mekhanizatsii sel'skogo khozyaystva.
(Tractors)

GNEVUSHEV, M.A.; DANILOCHKINA, L.Ye.

Use of black-and-white photography in geological documentation
of underground mine workings. Razved. i okh. nedr 29 no.9:32-36
S '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i
tekhniki razvedki.

15-57-7-9361

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7,
p 90 (USSR)

AUTHOR: Gneyushev, M. A.

TITLE: The Origin of the Oppositely Oriented Parallel Pits
on the Faces of Diamonds (O proiskhozhdenii obratno-
parallel'nykh treugol'nykh vpadin na granyakh almaza)

PERIODICAL: Mineralog. sb. L'vovsk. geol. o-va, 1955, Nr 9,
pp 25-30

ABSTRACT: The author enumerates different observations of tri-
angular pits and projections on the octahedral faces
of a diamond, and he notes that the triangular pro-
jections are always oriented with their edges parallel
to the edges of the octahedral faces, whereas the
triangular pits (most commonly) are disposed in an
oppositely parallel attitude and only occasionally have
a parallel orientation. He shows that the pits are

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M. Gneyushev, Geologiya, 1957, Nr. 7.

15-57-7-9361

The Origin of the Oppositely Oriented Parallel Pits (Cont.)

much more widespread than the projections. In explaining the origin of the oppositely parallel orientation of the triangular pits he adopts the view that the arrangement is the result of growth. He also associates the parallel orientation of the projections with growth and recognizes that the pits with parallel orientation are solution figures. The author sees support for his view in the experiments on the burning of diamonds, in which triangular projections with parallel orientation are obtained.

Card 2/2

M. O. Kliya

15-57-7-9362
Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7,
p 90 (USSR)

AUTHOR: Gnevushev, M. A.

TITLE: The Fluorescence of Diamond (O fotolyuminestsentsii
almaza)

PERIODICAL: Mineralog. sb. L'vovsk. geol. o-va pri un-te, 1956,
Nr 10, pp 325-329

ABSTRACT: A consignment of diamonds was studied with the portable
apparatus LYuM-1 (PRK-4 lamp, UFS-3 light filter,
voltage of 75 v, current strength of 3.75 amp). Different
fluorescent colors were observed: predominantly
shades of blue and yellow, rarely yellowish red, and
very rarely green. Densely smoky, yellow, and highly
iron-stained crystals did not fluoresce at all and
seemed to be stained in dark violet or velvet-black
colors. After segregating the diamonds of the con-
signment according to density of color, the following

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Moskva. Sovuznyy TREST № 2

15-57-7-9362

The Fluorescence of Diamond (Cont.)

Well-formed, transparent, and colorless crystals are characterized by medium blue fluorescence. Distorted forms, the presence of intergrowths, decrease in transparency, and the appearance of colors and point inclusions lower the fluorescence to yellows and red-yellows. Thus the conditions of crystallization of the diamonds affect their fluorescent properties.

Card 3/3

V. A. Vorob'yeva

GNEVUSHEV, M.A.

Traces of scouring on diamond grains. Zap.Vses.min.ob-va 85
no.3:401-403 '56.
(Diamonds)

GNEVUSHEV, M. A.

Changes in the elementary cell dimensions of the garnets as a function of their chemical composition. M. A. Gnevushev, A. I. Kalfina, V. I. Mikhalev, and G. I. Sankov. Zapiski Vsesoyuzn. Mineral. Obshchestva 65, 472-90 (1970); cf. Fleischer, C.A. 72, 8728; Skinner, C.A. 81, 72484.

From precision x-ray measurements of analyzed garnets, equations and graphic diagrams have been derived which show the systematic changes in the dimensions of the elementary cells a_0 as a function of the composition and the ionic radii of bi- and trivalent metals (r'' and r''') in the garnets. For the simple effect of bivalent cations (with av. radii r'' between 0.783 and 0.833 kX, and a const. radius $r''' = 0.671$ EX, $r''' = 0.413$ kX), the equation $a_0 = 10.629 + 1.560 r''$ is the linear relation valid in the series of the pyrope-almandite-spessartite garnets. The corresponding relation in the grossularite-andradite series is given by the function $a_0 = 10.693 + 2.000 r'''$ (for a const. av. $r'' = 1.01$ EX, and $r''' = 0.413$ kX). Both relations can be combined for polymoly garnets in the formula $a_0 = 9.125 + 1.560 r'' + 2.000 r'''$, as a very satisfactory approximation, with 3 to 4% accuracy. Further diagrams show the interrelation of r'' and r''' with a_0 , and the a_0 - r'' graphs for the systems pyrope-almandite-grossularite, and grossularite-andradite-almandite. For practical purposes this latter diagram is highly useful, and only the presence of MnO and Cr_2O_3 may bring about slight deviations. For the pure ends of the end members in the garnet group new data are given of a_0 (in kX): pyrope = 11.435; almandite = 11.490; spessartite = 11.578; grossularite = 11.840; andradite = 12.040; overhitite = 12.00. In addition are given those of "khuburite" ($3MgO.Fe_2O_3.2SiO_4$) = 11.036; "skingite" ($3FeO.Fe_2O_3.3SiO_4$) = 11.695; "calderite" ($3MnO.Fe_2O_3.3SiO_4$) = 11.805; "blythite" ($3MnO.Mn_2O_3.3SiO_4$) = 11.804. For these latter Mn garnets the radii $r'' = 0.80$ and $r''' = 0.43$ kX were calculated.

TATARSKIY, V.B.; FRANK-KAMENETSKIY, V.A.; BURAKOVA, T.N.; NARDOV, V.V.;
PETROV, T.G.; KONDRAT'YEVA, V.V.; KAMENTSEV, I.Ye.; CHERNYSHEVA,
V.F.; ALEKSEYEVA, N.P.; ARTSYBASHEVA, T.P.; BAEANOVSKAYA, N.I.;
BUSSIN, I.V.; VIREMOTSKO, I.A.; GNEVUSHEV, M.A.; GOYKO, Ye.A.;
KOMKOV, A.I.; KOTOVICH, V.A.; LITVINSKAYA, G.P.; MIKHREYVA, I.V.;
MOKIYEVSKIY, V.A.; PETROVA, L.V.; POPOV, G.M.; SAFRONOVA, G.P.;
SOBOLINA, V.V.; STULOV, N.N.; TUGARINOVA, V.G.; SHAFRAZOVSKIY, I.I.;
SHTERNBERG, A.A.; YANULOV, K.P.

O.M. Ansheles; obituary. Vest. LGU 12 no.18:152-154 '57. (MIRA 11:3)
(Ansheles, Osip Markovich, 1885-1957)

BOBRIYEVICH, A.P., sotrudnik; BONDARENKO, M.N., sotrudnik; GNEVUSHEV, M.A., sotrudnik; KIM, N.D., sotrudnik; KORESHKOV, B.Ya., sotrudnik; KURYLEVA, N.A., sotrudnik; NEFEDOVA, Z.D., sotrudnik; POPUGAYEVA, L.A., sotrudnik; POPOVA, Ye.E., sotrudnik; SKUL'SKIY, V.D., sotrudnik; SMIRNOV, G.I., sotrudnik; YURKEVICH, R.K., sotrudnik; PAYNSHTEYN, G.Kh., sotrudnik; SHCHUKIN, V.N., sotrudnik; Burov, A.P., nauchnyy redaktor; SOBOLEV, V.S., nauchnyy redaktor; VERSTAK, G.V., redaktor izdatel'stva; KRYNOCHKINA, K.V., tekhnicheskiy redaktor

[Diamonds of Siberia] Алмазы Сибири. [Moskva] Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1957. 157 p. (MLRA 10:?)

1. Russiia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr.
2. Amakinskaya ekspeditsiya Glavuralsibgeologii Ministerstva geologii i okhrany nedr SSSR (for Bobriyevich, Bondarenko, Gnevushev, Kind, Koreshkov, Kuryleva, Nefedova, Popugayeva, Popov, Skul'skiy, Smirnov, Yurkevich, Paynshteyn, Shchukin)
(Siberia--Diamonds)

GNEVUSHEV, M.A.; BOBKOV, N.A. [deceased]; BARTOSHINSKIY, Z.V.

Etching and dissolving traces on Yakutian diamonds. Min.sbor.
no.11:22-37 '57. (MIRA 13:2)

1. Amakinskaya ekspeditsiya Glavuralsibgeologii Ministerstva
geologii okhrany nedr SSSR.
(Yakutia--Diamond crystals)

BARTOSHINSKIY, Z.V.; GNEVUSHEV, M.A.

Causes of optical anisotropy in diamonds. Min.sbor. no.12;
57-66 '58. (MIRA 13:2)

1. Amakinskaya ekspeditsiya Ministerstva geologii i okhrany
nedr SSSR.
(Diamonds--Optical properties)

GNEVUSHEV, M.A.; NIKOLAYEVA, E.S.

Olivin and pyrope inclusions in Yakutian diamonds. Min. gbor.
no.12:440-442 '58. (MIRA 13:2)

1. Amakinskaya ekspeditsiya Yakutskogo geologicheskogo
upravleniya.
(Yakutia--Chrysolite) (Yakutia--Pyrope)

Gnevushin, M.A.; Gomon, G.O.; Chernenko, A.I.

Effect of the chromium content of pyrope on the height of maximal curves of spectral absorption. Zap. Vses. min. ob-va 87 no.1:85-89 '58. (MIRA 11:6)

1. Amakinskaya ekspeditsiya Glavuralsibgeologii, st. Nyurba.
(Chromium--Spectra) (Garnet)

GNEVUSHEV, M. A. Cand Geol-Min Sci -- (diss) "Diamonds of western Yakutiya."
Len, 1958. 15 pp (Min of Geology and Mineral Conservation USSR. All-Union
Sci Res Geol Inst VSYeGYeI. Amakin Expedition of Yakut^{sk} Geol Administration),
100 copies (KL, 11-58, 114)

62-4134-1
M. A.

PLACE 1 BOOK EXHIBITIONS 50/2028

Academy nauk SSSR. Teknicheskaya filial

Materijal po geologii polzunovym i slupovym yabutim (Materials on the Geology of the Minerals of Takutzya) Moscow: Izd-vo Akademi SSSR, 1959. 199 p. (Series: Trudy. Seriya geologicheskaya. Sbornik, no. 4.) Errata slip inserted. 2,500 copies printed.

Lang. Ed.: N. V. Charkovskiy Ed. of Publishing House: S. P. Shabolov. Tch. Ed.: P. S. Kachina.

PURPOSE: This collection of articles is intended for geologists, mineralogists, petrographers, and stratigraphers.

COMMENT: This collection of articles discusses the geology of various East Siberian mineral complexes. Of particular interest are an article on Takutzya diamonds (photographs show morphology and crystal structure) and one on alterations in rock complexes (abutment, bioturbation, etc.). References accompany each article.

Florov, B. I. An Example of Alterations in the Vicinity of a Vein in a Deposit of Northeastern USSR 3

Babirivich, A. P. and N. A. Kuplyeva. On the Petrography of Siberian Khibnitites 32

Sazarov, G. I. On the Mineralogy of Siberian Khibnitites 67

Gerasimov, M. A. and Z. V. Bartolobinskaya. On the Morphology of Yakut' Diamonds 74

Yil'shov, A. V. Upper Devonian Intrusive Rocks of the Northern Extremity of the Sel'sko-Uchen' Ridge and the Triassic Diabases of the Western Slope of the Western Tschibya'ya'ye' Ridge 93

Klimonchuk, T. B. Material on the Stratigraphy and Facies of Sel'sko-Uchen' Ridge 124

Strugov, A. S. On the Geology of the Kengendyrykayye Brown Coal Deposits of the Sel'sko-Uchen' Ridge 125

Bol'shov, A. S. Cambrian Stratigraphy of the Lower Course of the Glema River 151

Tolochek, A. S. New Data on the Petrology of the western Verkhneyay'e' Ridge 165

STANDBY: 11-11-7 of Congress

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12-21-49

BOBRIYEVICH, A.P.; BONDARENKO, M.N.; GNEVUSHOV, M.A.; KRASOV, L.M.;
SHIRNOV, G.I.; YURKEVICH, R.K.; SOBOLEV, V.S., akademik, nauchnyy
red.; VERNSTAK, G.V., red.izd-va; GUROVA, O.A., tekhn.red.

[Diamond deposits of Yakutia] Almaznye mestorozhdeniya Iakutii.
Nauchnyi red. V.S.Sobolev. Moskva, Gos.nauchno-tekhn.izd-vo
lit-ry po geologii i okhrane nedr, 1959. 526 p. (MIRA 12:11)
(Yakutia--Diamonds)

ANDRIANOV, Nikolay Ivanovich; BUENOV, Yevgeniy Sergeyevich; GNEVUSHEV,
Mikhail Andreyevich; IOANNESYAN, Rollen Arsen'yevich; LITVINOV,
Nikolay Nikolayevich; MEYERSON, Yevgeniy Grigor'yevich; MINDLIN,
Yakov Borisovich; ROMANTSEV, Yakov Antonovich; ALEKSIN, A.G., red.;
KAEVKOVA, S.M., vedushchiy red.; POLOSINA, A.S., tekhn. red.

[Diamond drilling] Almaznoe burenie. Moskva, Gos. nauchno-tekhn.
izd-vo neft. i gorno-toplivnoi lit-ry, 1961, 170 p. (MIRA 14:9)
(Boring) (Diamonds, Industrial)

GNEVUSHEV, M.A.; KRASOV, L.M.; DUBOTOVKO, Yu.V.; D'YAKOVA, N.I.

Color of Yakutian diamonds. Trudy IAFAN SSSR. Ser.geol.
no.6:87-96 '61. (MIRA 14:9)
(Yakutia--Diamonds)

GNEVUSHEV, M.A.; NIKOLAYEVA, E.S.

Solid inclusions in diamonds of Yakutian deposits. Trudy
IAFAN SSSR. Ser.geol. no.6:97-105 '61. (MIRA 14:9)
(Yakutia--Diamonds)

GNEVUSHEV, M.A.; BARTOSHINSKIY, Z.V.; ZINKOV, A.P.

Distribution of diamonds in the kimberlite pipes of western
Yakutia. Trudy IAFAN SSSR. Ser.geol. no.6, 106-122 '61.
(NIRA 14:9)

(Yakutia--Diamonds)

GNEVUSHEV, M.A.; FEDOROVA, L.G.

Effect of isomorphic substitutions on certain characteristics of the infrared spectra of garnet. Dokl. AN SSSR 146 no.3:672-675 S '62.
(MIRA 15:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut.
(Isomorphism) (Garnet—Spectra)

GNEVUSHEV, Mikhail Andreyevich; KORZHUYEV, S.S., st. nauchn.
sotr., kand. geogr. nauk, retsenzent; KOND, N.V., kand.
geol.-miner. nauk, retsenzent; VASIL'YEV, A.F., retsenzent;
KODIONOVA, F.A., red.; KISELEVA, M.D.; red.kart; KARPOVA,
T.V., tekhn. red.

[Yakut diamonds] IAkutskie almazy. Moskva, Uchpedgiz, 1963.
102 p. (MIRA 16:12)

1. Institut geografii AN SSSR (for Korzhuyev). 2. Yakutskiy
institut usovershenstvovaniya uchiteley (for Vasil'yev).
(Yakutia--Diamonds)

GNEVUSHEV, M.A.; GOMON, G.O.; FUTERGENDLER, S.I.

Relation of the luminescence of diamond to some of its other
properties. Min. sbor. no.17:82-89 '63. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut,
Leningrad.

GNEVUSHEV, M.A.; SHEMANIN, V.I.; SHEMANINA, Ye.I.

Book review. Min.sbor. 18 no.3:361-367 '64.

(MIRA 18:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut,
Leningrad.

GNEVUSHEV, M.A.; FUTERGENDLER, S.I.

Traces of magnetic melt in diamonds. Geol. i geofiz. no.2:155-157
'65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut,
Leningrad.

E 1-031-66 EWT(1)/EWT(m)/EWP(e) IWP(c) WH

ACC NR: AR5020044

SOURCE CODE: UR/0031/65/000/012/E054/E055

AUTHOR: Gnevushev, M.A.; Gomon, G.O.; Futergendler, S.I.

ORG: none

TITLE: Connection between the luminescence of a diamond and some of its other properties

SOURCE: Ref. zh. Khimiya, Abs. 12E30

REF SOURCE: Mineralog. sb. L'vovsk. geol. o-va pri un-te, no. 17, 1963, 82-89

TOPIC TAGS: diamond, luminescence, x ray analysis

TRANSLATION: A study was made of the luminescence of more than 100 diamonds from the kimberlite shaft "Mir" (West Yakutiya); at the same time a study was conducted of the morphological peculiarities of diamonds: coloring and degree of transparency. Some of the samples were subjected to x-ray analysis. For certain groups of the diamonds, a correlation was established between the luminescent and roentgenostructural spectra and the morphological characteristics. R. Khmal'nitskiy.

SUB CODE: 20

Cord 1/1

GNEVUSHEV, M.V., otv. red.; PERMINOV, S.V., red.izd-va; MAKRUSHIN, V.A.,
tekhn.red.

[Materials on the study of diamonds and diamond-potential
districts in the U.S.S.R.] Materialy po izucheniiu almazov i
almazonosnykh raionov SSSR, Leningrad, 1960. 186 p. (Leningrad.
Vsesciuznyi geologicheskii institut. Materialy, no.40) (MIRA 14:7)
(Diamonds)

GNEUSHEV, Vladimir Grigor'yevich; MAGIROV, V., red.; MIKHAYLOVSKAYA, N.,
tekhn. red.

[Pioneers of higher speed] Pionery bol'shikh skorostei. Mo-
skva, Izd-vo TsKVLKSM "Molodaia gvardiia," 1961. 31 p.

(MIRA 15:1)

(Tractors)

GNEVUSHEV, V.V. Cand Med Sci -- (diss) "Physiological bases of the treatment
of algic contractures of the upper extremities." Stavropol', 1957. 16 pp
(Stavropol' State Med Inst. Stavropol'skiy Kray Exercise-Therapy Dispensary),
200 copies (KL, 14-58, 116)

-100-

Gnevushev, V.V.

USSR/Human and Animal Physiology (Normal and Pathological).
Nervous System. Pain.

T-10

Abs Jour : Ref Zhur - Biol., No 16, 1958, 75144

Author : Gnevushev, V.V.

Inst : Stavropol'sk Medical Institute.

Title : On the Physiological Mechanism of Algia Contractors.

Orig Pub : Uch. zap. Stavropol'sk. med. in-t, 1957, vyp. 1, 127-132.

Abstract : 63 patients with algia contractors (AC) were observed which appeared as a result of fractures, sprains and bruises of the upper extremities and were not accompanied by damage of the nerve trunks. An active (per I.M. Sechenov) rest showed a favorable effect on the condition of AC, in the beginning a significant one (increase of the work ability and rate of the voluntary contractions, weakening of force of contractor contraction), and then

Card 1/2

GNEVUSHEV, V.V., dotsent

Need of inserting a correction in the calculation of the normal vital capacity of the lungs according to Anthony's method. Uch. zap. Stavr. gos. med. inst. 12:114-115 '63.

Importance of deep, spaced respiration and some characteristics features of the development of fundamental habits furthering it. Ibid.:116-117

Effect of deep, spaced respiration on the state of pulmonary ventilation in elderly persons. Ibid.:120-121

(MIRA 17:9)

1. Kafedra fizicheskogo vospitaniya, lechebnoy fizul'tury i meditsinskogo kontrolya (zav. dotsent V.V. Gnevushev) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

GNEVUSHEV, V.V., dotsent; PERESYPKIN, V.A.

Effect of deep, spaced respiration on the changes in some
oscillographic indices in elderly and old persons. Uch.
zap. Stavr. gos. med. inst. 12:118-119 '63. (MIRA 17:9)

1. Kafedra fizicheskogo vospitaniya, i vrachetnogo kontrolya
(zav. dotsent V.V. Gnevushev) Stavropol'skogo gosudarstvennogo
meditsinskogo instituta.

GNEVUSHEV, V.V., dotsent; KARASHUROV, Ye.S., kand. med. nauk; KRASNOV, Yu.P.,
assistant

Deep, spaced respiration as a factor in restoring the
functional possibilities of external respiration following
surgery for bronchial asthma. Uch. zap. Stavr. gos. med.
inst. 12:258-259 '63. (MIRA 17:9)

1. Kafedra obshchey khirurgii (zav. prof. Yu.S. Gilevich)
kafedra lechebnoy fizkul'tury i VK (zav. dotsent V.V.
Gnevushev) Stavropol'skogo gosudarstvennogo meditsinskogo
instituta.

GNEVUSHEV, V.V., dotsent; OSMIRKO, G.I., prepodavatel'

Deep and spaced respiration as a form of active rest in the
educational process of schoolchildren of the lower grades.
Uch. zap. Stavr. gos. med. inst. 12:404-405 '63.

(MIRA 17:9)

1. Kafedra fizicheskogo vospitaniya, lechebnoy fizkul'tury
i meditsinskogo kontrolya (zav. dotsent Gnevushev V.V.)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

GNEVUSHEVA, Yelizaveta Ivanovna; GUBER, A.A., otv. red.; GARMSEN,
O.M., red. izd-va; BELESLAVSKAYA, L.Sh., tekhn. red.

[In the land of three-thousand islands; Russian scientists in
Indonesia] V strane trekh tysiach ostrovov; russkie uchenye v
Indonezii. Moskva, Izd-vo vostochnoi lit-ry, 1962. 221 p.

(MIRA 15:9)

(Indonesia--Russian exploration)

GNEVUSHEVA, Yelizaveta Ivanovna; LIPETS, Yu.G., red.; VILENSKAYA, E.M., tekhn.red.

[Forgotten traveler; life and travels of Petr Ivanovich Pashino]
Zabytyi puteshestvennik; zhizn' i puteshestviia Petra Ivanovicha
Pashino. Moskva, Gos., izd-vo geogr. lit-ry, 1958. 110 p.
(MIRA 11:12)

(Pashino, Petr Ivanovich, 1838-1891)

GNEVYSHEV, M. N.

USSR/Physics

Corona, Solar

Corona Discharges

Aug 1946

"The Nature of Emission Lines in the Spectrum of the Solar Corona," M. N. Gnevyshev, 8 pp

"Priroda" No 8

Establishes ideal conditions for observations on the solar corona, discusses some of the observations which were conducted in 1938, 1941, and 1942. Saha stated that there are processes which occur in the corona of the sun which very closely simulate the fission of the Uranium atom. There are many more theories, however, which attempt to explain the emis-

ID

3677

USSR/Physics (Contd)

Aug 1946

sions from the solar corona, and as yet there is no definite solution to these phenomena.

1. YEYGENSON, M. S., GNEVYSHEV, M. N., OL', A. I., RUBASHEV, E. M.
2. USSR (600)
4. Physics and Mathematics
7. Solar Activity and its Terrestrial Manifestations, M. S. Yeygenson, M. N. Gnevyshev, A. I. Ol', B. M. Rubashev. (Moscow-Leningrad, State Technical Press, 1948). Reviewed by N. P. Barabashov, Sov. Kniga, No. 1, 1949.
9. [REDACTED] Report U-3081, 16 Jan. 1953, Unclassified.

GNEVYSHEV, M. N.

IA 41T103

USER/Physics

Sunspots

Solar Phenomena

Jan/Feb 1948

"The 22-year Cycle of Solar Activity," M. N. Gnevyshev,
A. I. Ol', Pulkova Observatory, Acad Sci, USSR, 3 pp

"Astr Zhur" Vol XIV, No 1

Discusses the change in polarity of sunspots, and the
law of formation of the 22-year cycle from the 11-
year cycle.

41T103

390. On the Nature of the Solar Particles (O Prirode Solnechnykh Korpuskul)
by N M Gnevny shov Akadem. Akad. 25 109-122 (1948) Mar-Apr (In Russian)

The known facts on polar auroras and geomagnetic storms are best explained by the hypothesis of particle streams originating in the regions of activity on the sun's surface. From the latitude distribution of the intensities of the magnetic disturbances, the author concludes that a vertical stream exists, the horizontal section of which can be evaluated in each particular case. For strong magnetic storms, the electric current thus determined reaches 0.6×10^5 amp. Studies of the fluctuations in the geomagnetic field show that the particle streams should be visualized as clouds which, due to velocity dispersion, assume an elongated shape while traveling from the sun to the earth. Analysis of the velocity distribution gives as the most probable value 2.5×10^9 km/sec. The ratio e/m is found to be 3.3×10^{-4} . The most probable composition of solar streams would thus be a mixture of α -particles and doubly ionized helium atoms. The velocity given above closely approaches that of α -particles emitted during thorium disintegration (2.2×10^9 km/sec). In this connection the author cites (1) the finding of thorium lines in the spectrum of the active regions on the sun's surface by C E Moore and A S King (Proc. Roy. Soc. Eng. Pac. 55 36 (1943)) and (2) the hypothetical picture of nuclear reactions in the same regions suggested by M N Saha (Proc. Nat. Inst. Sci. India B (1942); Proc. Phys. Soc. (London) 57 271 (1945)).

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CIA-RDP86-00513R000615510012-0

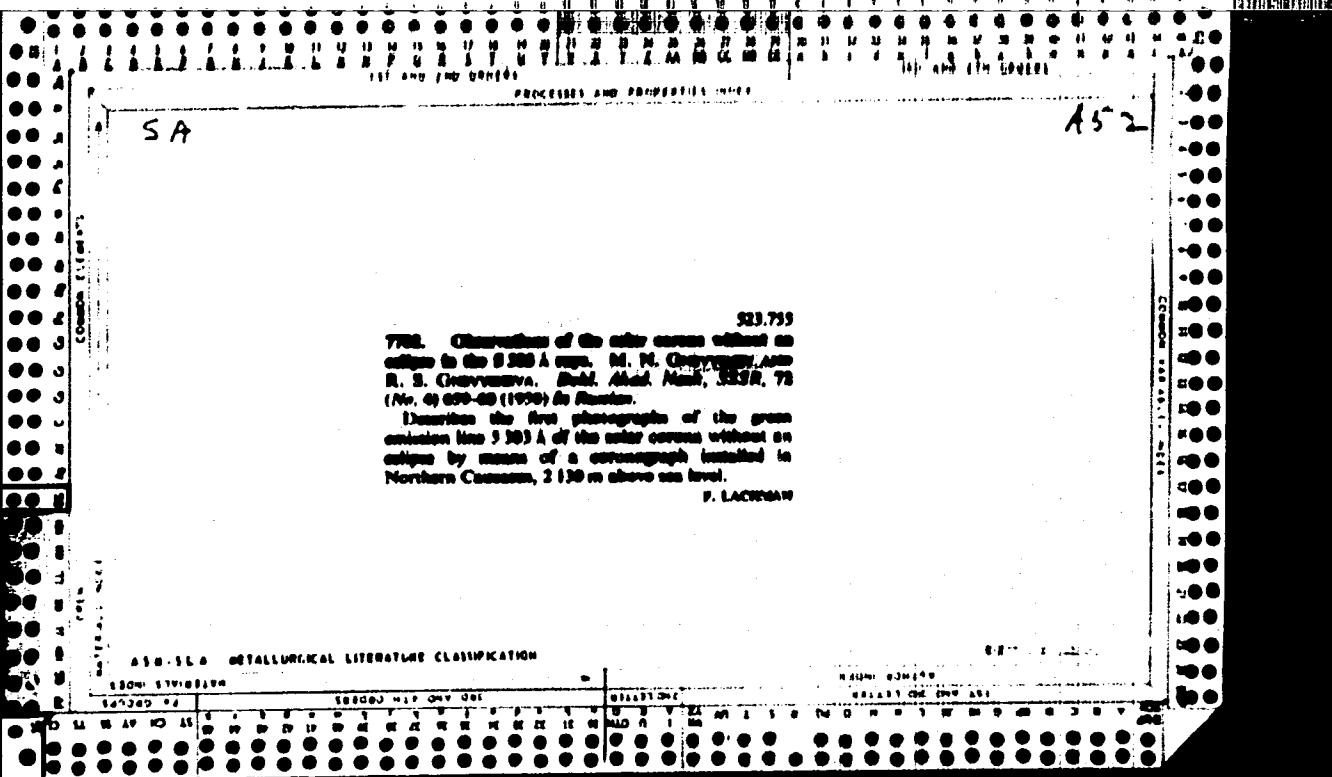
GNEVYSHEV, M. N.

Gnevyshev, M. N. and Gnevysheva, R. S. - "The connection between the laws of Chabe-Wolf and of Sperrer", Byulleten' Komissii po issledovaniyu Solntsa (Akad. nauk SSSR) No. 1, 1949, p. 1-8

SO: U-4631, 16 Sept. 53, (Letopis 'nykh Statey, No. 24, 1949).

APPROVED FOR RELEASE: 09/19/2001

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GNEVYSHEV, M. N.

17872

USSR/Astronomy - Sun

21 Jan 51

"Observations of the Solar Corona Without Eclipses
in 6374.5-Angstrom Rays and of Prominences in
6562.8-Angstrom Rays," M. N. Gnevyshev, R. S.
Gnevysheva, Mt Astr Sta of Main Astr Obs, Acad
Sci USSR

"Dok Ak Nauk SSSR" Vol LXXVI, No 3, pp 375, 376

Explains how subject photographs were successfully
made, without eclipse, with quartz interference --
polarization filter designed by A. B. Gil'varg,
Inst of Cryst, Acad Sci USSR. Submitted 24 Nov 50
by Acad S. I. Vavilov.

17872

U.S.S.R.

✓ 6.7-47

Gnevyshev, M. N., Gornaya astronomicheskaya stantsiya. [On mountain astronomical station.] *Priroda*, Moscow, No. 9:47-52, Sept. 1953. 3 figs., 9 photos. [DL]—A general description of physical properties of solar corona and brief outline of the progress in observation methods and results obtained. The author gives a rather detailed report on the installations and operation of the recently organized Mountain Astronomical Station near Kislovodsk (Caucasus 2130 m) attached to the Main Astronomical Observatory (Pulkovo) of the Academy of Sciences. Figures show the instruments and some photographic of corona and spectra registered. Points out that the combination of instruments used by this station permit simultaneous investigation of physical conditions in the disturbed places of the solar atmosphere and individual formations in connection with all the other phenomena. The importance of simultaneous and combined study is stressed and reference made to many instances of fruitless work when trying to investigate solar phenomena separately from other closely associated phenomena. Much attention is paid to the training of scientific personnel (students of graduate courses from Leningrad and Kiev universities). *Subject Headings:* 1. Astrophysics 2. Sun's corona 3. Astronomical observatories 4. Kislovodsk, U.S.S.R.—N.P.Z.

b2

GNEVYSHEV, M. N. and GNEVYSHEVA, R. S.

"Start of Regular Solar Corona Observations Without Eclipses".
Byul Komis. po issled. Solntsa, AN SSSR, No. 10, pp 60-62, 1954.

The solar spectrograph of the Peak Astronomical Station of Kislovodsk mounted in 1952 is described. The spectrograph was basically intended for the line 5303 Å observation. The diameters of the mirror and the collimator are 50 mm, the diffraction grating of Gerasimov's work; the photographic exposure is a few seconds. (RZhAstr, No. 1, 1956)

SO: Sum No 884, 9 Apr 1956

GNEVYSHEV, M.N.; GNEVYSHEVA, R.S.

Characteristics of the solar corona and prominences. Dokl. AN SSSR 94
no. 4:639-641 p '54. (MLRA 7:2)

1. Gornaya astronomicheskaya stantsiya Glavnay astronomicheskoy
observatorii Akademii nauk SSSR. (Sun)

GENEVSEV, M. N.

2238. EMISSION OF CALCIUM IN THE 6374.5 CONONA. 00017
M. M. Gerasimov and N. F. Chertkov.

Dokl. Akad. Nauk SSSR, Vol. 94, No. 5, 611-18 (1954). In Russian.

A brief summary of the evidence that the observations made on 31 March 1953 of the emission from the corona, identified the ionized Ca lines at 6374.5 Å in agreement with the hypothesis of Gerasimov (1948).

W. H. Christie

4W from
W. H. Christie

Gnevyshev, M. N.

USSR/Astronomy - Sun chromosphere

Card 1/1 Pub. 22 - 11/52

Authors : Gnevyshev, M. N., and Gnevysheva, R. S.

Title : ~~unpublished~~ Brightness of the coronal line, 5302.8 Å, in the solar chromosphere

Periodical : Dok. AN SSSR 101/4, page 627, Apr 1, 1955

Abstract : Spectrograms are presented in an attempt to prove that the sun's chromosphere consists of a mass of prominences and that the space between them is filled with a corona substance. The corona line, 5302.8 Å, is clearly seen on the spectrograms (fig. 1 and 2). Two USSR references (1950-1953). Illustrations.

Institution : Acad. of Sc., USSR, the Mountain Station of the Main Observatory

Presented by: Academician G. A. Shaym, January 1, 1955

USSR/ Astronomy - Solar corona

Card 1/1 Pub. 22 - 10/47

Authors : Gnevyshev, M. N., and Gnevysheva, R. S.

Title : Some results of the observations of the solar corona outside the eclipse

Periodical : Dok. AN SSSR 101/6, 1017 - 1018, Apr. 21, 1955

Abstract : Some statements, expressed by the authors, concerning the intensity variations of the green, 5302.8A, and the red, 6374.5A, spectral lines in the solar corona are presented. The phenomenon was observed by the authors outside the eclipse. The green line was under observation since the latter part of 1952, and the red line since the beginning of 1953. Four references: 1 Germ. and 3 USSR (1950-1954). Graphs; illustrations.

Institution : Acad. of Sc., USSR, the Main Astronomical Observatory

Presented by: Academician G. A. Shapin, January 6, 1955

GNEVYSHEV, M.N.; GNEVYSHEVA, R.S.

New data on the solar corona. Izv.Krym.astrofiz.obser. 16:
212-215 '56. (MIRA 13:4)

1. Gornaya astronomiceskaya stantsiya Glavnoy astronomicheskoy
observatorii AN SSSR.
(Sun--Corona)

GNEVYSHEV, M.N.; GNEVYSHEVA, R.S.

Observations of line 5694 Å in the solar corona. *Astren.tairk.*
no.169:6-7 '56. (MIRA 9:10)

1.Gornaya astronomiceskaya stantsiya Glavnayi astronomiceskoy
observatorii Akademii nauk SSSR.
(Sun--Corona)

33-4-17/19

AUTHOR: Gnevyshev, M. N., Gnevysheva, R. S. and Kurt, V.G.

TITLE: Observations of the infrared coronal lines 10747 Å and 10798 Å. (Osnabryudenii infrakrasnykh koronal'nykh liniy 10747 Å i 10798 Å.)

PERIODICAL: Astronomicheskiy Zhurnal, 1957, Vol.34, No.4, pp.671-674 (USSR)

ABSTRACT: A method is described whereby the infrared lines of the corona 10747 and 10798 Å may be studied using an electron-optical converter. This was developed at the Pulkovo Observatory in co-operation with the Shternberg State Astronomical Institute. Systematic observations are being carried out at present using this method. In addition, the helium lines 10830, and the hydrogen lines 10938 Å of the Paschen series are being obtained during the exposures. A preliminary comparison of the distributions of intensity in the infrared lines round the sun among themselves, and also with the distribution of the lines 5303 and 6374 Å, has shown similarities in the behaviour of the lines 10798, 10747 and 5303 Å. This may be explained by the near-equality of their ionisation potentials. The behaviour of the line 6374 Å differs markedly from the behaviour of the above three lines. This in turn may be explained by a considerable difference

Card 1/2

55-4-17/19

Observations of the infrared coronal lines 10747 Å and 10798 Å. in the ionisation potentials of the line 6374 Å, and confirms the correctness of the identification of the lines. Latest observations confirm the presence of the luminescence in the helium line 10830 Å at certain places in the corona. There are 3 figures, 2 tables and 4 references, all of which are Slavic.

SUBMITTED: April, 10, 1957.

ASSOCIATION: The Mountain Astronomical Station of the Main Astronomical Observatory of the Academy of Sciences of the USSR. The Shternberg State Astronomical Institute. (Gornaya Astronomicheskaya Stantsiya Glavnaya Astronomicheskoy Observatorii Akademii Nauk SSSR. Gos. Astronomicheskiy In-T im. P. K. Shternberga).

AVAILABLE: Library of Congress

Card 2/2

AUTHOR: Gnevyshev, M. N. 47/30-58-8-18/43

TITLE: The Astronomical Mountain Station Near Kislovodsk (Na gornoj astronomiceskoy stantsii pod Kislovodskom)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 8, pp. 107-109 (USSR)

ABSTRACT: This mountain station which is affiliated to the Astronomical Central Observatory AS USSR operates now for 10 years (Fig 1). It was built for the observation of the sun corona. The station is located 30 kilometres from Kislovodsk on a mountain peak at an altitude of 2130 meters. The surrounding low-topped mountain ranges and the absence of turbulent air currents facilitate the photographic work in the observatory. The station is also equipped with apparatus for the observation of the chromo- and the photosphere. Apart from the coronograph the station is equipped with a photoheliograph, with a chromosphere telescope, with a large diffraction spectrograph and with a radio interferometer for a wave length of 1,7 m. There is also a laboratory equipped with apparatus for geo- and photometric measurements. The results of the observations provide a rounded-off picture of processes in the sun.

Card 1/3

The Astronomical Mountain Station Near Kislovodsk

SCV/30-58-8-18/43

Part of the equipment was built by the ~~staff~~ of the Pulkovo observatory, the rest under the direction of P.V. Dobychin and in the optical workshop of the Pulkovo observatory under the supervision of V.G. Shreyber. The spectrographs are equipped with diffraction gratings by F.M. Gerasimov. Interference-polarization filters by A.B. Gil'varg and S.B. Ioffe were used. This work is supervised by the Komissiya po issledovaniyu Solntsa Akademii nauk SSSR (Commission of Solar Research, AS USSR). The research program of this mountain station incorporates systematic observations of the sun spots, of sun eruptions, of flocculi, of the magnetic fields of the sun spots, of the "fibers", of the protuberances and of the distribution of luminous intensity in the corona. In 1954 it was found that at certain times helium lines can be observed in the corona. The observation of the infrared corona lines 10747 and 10798 Å was begun with the assistance of the Gosudarstvennyy astronomicheskiy institut im. P.K. Shternberga (State Astronomical Institute imeni P.K. Shternberga). Graduate students from the universities in Moscow, Leningrad, Kiev and Lvov as well as collaborators of the observatories in China (Kitay), Roumania (Rumyniya), Hungary (Vengriya) and

Card 2/3

The Astronomical Mountain Station Near Kislovodsk 101/50-59-12/65

Czechoslovakia (Cheskoslovakiya) are continuously trained in
this station.
There are 7 figures.

Card 3/3

3,1540

8/035/61/000/005/023/042
A001/A101

AUTHOR: Gnevyshev, M.N.

TITLE: Technology and methods of coronal observations

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 5, 1961, 55, abstract 5A361 (V sb. "Nablyudeniya Solntsa", Moscow, AN SSSR, 1959, 36 - 38, Engl. summary)

TEXT: The author points out that observations of the solar corona carried out at various stations by different methods do not provide continuous series of coronal data. He describes the methods of observations and processing employed at the Gornaya stantsiya (Mountainous station) of the Pulkovo Observatory (Kislovodsk). The experience of this station operation can be used to work out the most efficient methods for all coronal stations. The observational results of the Mountainous station at Kislovodsk and at the Pic-du-Midi Observatory are in good agreement.

A. D.

[Abstracter's note: Complete translation]

Card 1/1

3 (1)

AUTHOR:

Gnevyshev, M. N., Candidate of
Physical and Mathematical Sciences

SOV/50-59-5-23/15

TITLE:

In the Astronomical Mountain Station (Na Gornoy
astronomicheskoy stantsii)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1959, Nr 5, pp 99-100 (USSR)

ABSTRACT:

A photograph of a sodium cloud, ejected by a Soviet cosmic rocket was taken on January 3, 1959 in the mountain station of the Pulkovo Main Observatory of the Academy of Sciences of the USSR, situated near Kislovodsk at an altitude of 2000 m above sea level. The formation of such a cloud had been planned in order to determine optically the coordinates of the rocket. I. S. Shklovskiy calculated that by the dispersion of about 1 kg sodium a cloud of 100 km in diameter forms within several seconds; it is possible to record such a cloud with the usual instruments. The photograph was taken by means of special cameras mounted on the telescope of an absence-of-eclipse coronograph (Fig 1). Figure 2 shows the photograph of such a sodium cloud in 80-fold magnification. Twenty four photographs were taken with a time of exposure of 20 seconds each. There are 2 figures. ✓

Card 1/1

Card 1/1

S/033/60/037/02/004/013
E032/E914

AUTHOR: Gnevyshev, M. N.

TITLE: The Connection Between Optical and Radio Emission of the
Solar Corona.

PERIODICAL: Astronomicheskiy zhurnal, Vol 37, Nr 2, pp 227-235 (USSR)
1960

ABSTRACT: High quality and comprehensive non-eclipse observations
of the solar corona were carried out during the IGY. This
enabled more detailed comparisons to be carried out be-
tween the coronal radiation at λ 5303 and meter waves,
and also geomagnetic disturbances. The present paper
reports on the heliographic distribution of intensity at
 λ 5303, the solid angle of radio emission in the meter
range vis a vis the optical emission of the corona, and
the connection between radio emission and geomagnetic ~
storms. All the results indicate that the optical, radio
and geomagnetic phenomena can be looked upon as a single
complex. A corpuscular stream having a solid angle of the
order of 8° passes through the corona and causes the
emission of the line λ 5303 and a strong emission having
a frequency of 200 Mc/s. The radio emission is excited in

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E032/E914

The Connection Between Optical and Radio Emission of the Solar Corona

a cone which has the same solid angle as the geomagnetically active corpuscular stream. A noise storm on meter waves is usually observed 2-4 days before a geomagnetic storm. This is due to the fact that the corpuscular stream is delayed by this interval of time before it reaches the Earth (as compared with the radio emission). The intensity of the coronal line λ 5303 has a maximum above sunspots. Fig 1 shows the intensity distribution for this line with latitude relative to spots. The apparent maximum of intensity of coronal formations occurs a day after their

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EO32/E914

The Connection Between Optical and Radio Emission of the Solar Corona

passage through the East limb of the sun, or a day before they cross the West limb. There are 5 figures and 18 references, of which 3 are French, 1 is Dutch, 1 is Swiss, 3 are Soviet and the rest are English.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya Akademii nauk SSSR (Main Astronomical Observatory, Academy of Sciences USSR)

SUBMITTED: August 13, 1959.

VR

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N.
GNEVYSHEV, M. S.

"On the connection of coronal emission in optical and radio spectrum."
report to be submitted for the IAU Symposium on the Corona, Cloudcroft, New Mexico, 28-30 Aug 1961.

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S/030/61/006/005/006/012
R*05/B202

3.1800

AUTHOR: Gnevyshev, M. N.

TITLE: Solar Eclipse on February 15, 1961

PERIODICAL: Akademiya nauk SSSR. Vestnik Vol 31, No. 5, 55-59 My. '61. X

TEXT: The author describes the preparations made for the observation of the total solar eclipse made by the Astronomicheskiy sovet Akademii nauk (Astronomical Council of the Academy of Sciences) as well as the observations themselves. For this purpose a special commission headed by M. N. Gnevyshev was formed. The calculation of data of the solar eclipse which had been made by A. A. Mikhaylov, the map (Fig. 1), and the preliminary data were sent to the astronomical radio and geophysical institutions and published in the "Astronomicheskiy zhurnal". In the USSR the towns of Yevpatoriya, Rostov-na-Donu, Novocherkassk, and Belebey were in the center of the zone of the total solar eclipse. The maximum height of the sun and the longest duration of the total phase were observed at Rostov-na-Donu and at the Krymskaya astrofizicheskaya observatoriya Akademii nauk SSSR (Crimean Astrophysical Observatory of the USSR). The main

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Solar Eclipse on February 15, 1961

task was the study of the outer solar corona. Expeditions were sent into the zone of the total solar eclipse. Simultaneously, a series of geophysical rockets were launched into this zone from which the corona and the changes in the earth's atmosphere during the solar eclipse were studied. The following observations are mentioned: 1) Optical observations. The following institutions took part in the observations: Astronomicheskiy institut im. P. K. Shternberga (Astronomical Institute imeni P. K. Shternberga), Astrofizicheskaya observatoriya Akademii nauk Kazakhskoy SSR (Astrophysical Observatory of the Academy of Sciences of the Kazakhskaya SSR), Astronomicheskaya observatoriya Leningradskogo universiteta (Astronomical Observatory of Leningrad University), Institut fiziki atmosfery Akademii nauk SSSR (Institute of Physics of the Atmosphere of the Academy of Sciences USSR), Institut prikladnoy geofiziki Akademii nauk SSSR (Institute of Applied Geophysics of the Academy of Sciences USSR), Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiowoln Akademii nauk SSSR (Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation of the Academy of Sciences USSR). Observations were made aboard a plane of type TU - 104 (TU-104) at a height of 10 km. The plane was put at the disposal of the Astronomical Council by the Nauchno-issledovatel'skiy

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Solar Eclipse on February 15, 1961

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institut grazhdanskogo vozduzhnogo flota (Scientific Research Institute of the Civil Air Fleet). Measures were taken to remove the clouds above the Crimean Astrophysical Observatory, the Dzhankoy and Rostov-na-Donu. At the Abastumanskaya observatoriya (Abastuman' Observatory), Sverdlovsk, and Belebey, scientists succeeded in making observations after removal of the clouds. Important preparative work was done at the Gornaya astronomicheskaya stantsiya (Astronomical Mountain Station) (Kislovodsk). 2) Radio-astronomical observations. They were made at 6 stations in Pulkovo. The Krymskaya nauchnaya stantsiya (Crimean Scientific Stations) of the Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR (Physics Institute imeni P. N. Lebedev of the Academy of Sciences USSR) made observations in the range of the 20 and 80-cm waves and of the 1.45 and 1.63-m waves (see Table). At the station of the Physics Institute at Serpukhov observations were made by means of a giant radiotelescope of a diameter of 22 m. The Nauchno-issledovatel'skiy radiofizicheskiy institut (Radiophysical Scientific Research Institute) of the Gor'kovskiy universitet (Gor'kiy University) made observations at Gor'kiy by means of a mirror of 1 m diameter. In Yalta observations were made by means of radiotelescopes with a mirror diameter of 1.5 and 4 m. The Astrofizicheskaya laboratoriya

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S/0033/63/040/013/0401/0412

AUTHOR: Gnevyshev, M. N.

71

70

TITLE: Corona and the eleven-year cycle of solar activity

SOURCE: Astronomicheskiy zhurnal, v. 40, no. 3, 1963, 401-412

TOPIC TAGS: solar activity, solar corona, 11-year cycle, sun spots, solar prominences, solar latitude effect

ABSTRACT: The author employs systematic data published in the Quarterly Bulletin on Solar Activity on measurements of the 5303-angstrom coronal-line intensity performed at the Kislovodsk, Pic-du-Midi, Mt. Norikura, Climax, and Sacramento Peak (New Mexico) solar observatories. Existing U.S. and French comparisons, showing that the measurements of Kislovodsk and Pic-du-Midi stations are virtually identical, are confirmed. The present paper is fundamentally based on correlations of the data of the other three stations with those of Kislovodsk (K) and the Pic-du-Midi (P). The data scatter on the correlation graph between the U.S. and Japanese stations against K and P is interpreted in terms of errors in photometric measurement, errors in the alignment of the spectrograph slit on the prescribed position angle (especially in the presence of sharply delimited coronal rays), errors in the

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determination of the distance from the photosphere at which measurements of the coronal intensity are made, and lack of simultaneity in the measurements. Year-to-year variations of the ratio of the 5303-angstrom line between the P and K vs. the U.S. and the Mt. Norikura stations are interpreted in terms of unfortunate selections of observation days at Norikura which inadvertently must have fallen on days with weak intensities of the coronal line, and in terms of intense variations of the photometric system of the U.S. stations. The intensity of the coronal emission and the appearance of prominences and sunspots in the current 11-year cycle are found to exhibit 2 maxima, equivalent in the total energy emitted by the corona and the prominences: One during 1956-57, the other during 1959-60. During the first maximum the emission intensity increased at all solar latitudes between the equator and the poles, attaining a maximum at latitude 25 degrees. The second maximum was characterized by increases in emission intensity in the equatorial zone only, with a maximum attained at latitude 10-15°. In either maximum did the sunspot activity attain a maximum development one year before that of the maximal coronal emission, so that the latter occurred during the period of greatest decrease in the spot-formation activity. It is noted that the second emission maximum had remained undetected to date, because until now the characteristics of the spot-formation activity, in the examination of the 11-year emission cycle, had been obtained by summation over the entire disk of the sun. The following arguments are adduced in

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favor of the applicability of the findings of the current cycle to antecedent 11-year cycles: (a) During all solar eclipses occurring in maximum-activity years of various cycles, an increase in the coronal emission was invariably observed around the entire solar disk, whereas in years close to a minimum intensive emission was noted in the equatorial zone alone. (b) In all observed 11-year cycles the latitudes of maximum emission decreases to a latitude of approximately 10° at mid-cycle and remains essentially unchanged during the second half of the cycle. There are 5 tables and 11 figures.

ASSOCIATION: Gornaya astronomicheskaya stantsiya Glavnay astronomicheskoy obser-
torii Akademii nauk SSSR, Kislovodsk (Astronomical Mountain Station, Main Astro-
nomical Observatory, Academy of Sciences, SSSR)

SUBMITTED: 28Feb63

DATE ACQD: 01Ju163

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SUB CODE: AS, PH

NO REF SOV: 000

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Pd-1/Pe-1/Pq-1/Pae-2/Pt-10/

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ACCESSION NR A44040598 BOOK EXPLOITATION

Vyazanitsyn, V. P.; Gnevitshev, M. M.; Dobrovolskiy, O. V.; Krut, V. A.; Markov, A. V.; Molchanov, A. P.; Sobolev, V. M.; Sharonov, V. V.

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A course in astrophysics and stellar astronomy. v. 3 (Курс астрофизики и звездной астрономии. т. 3), Moscow, Izd-vo "Nauka", 1964, 375 p. illus., bibliogr., indices. 2,150 copies printed.

TOPIC TAGS: astrophysics, stellar astronomy

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L 10783-65 ENT(i)/ENG(v)/EEC-l/EEC(t)/FCC Pe-5/Pq-4 AP533/ESP(t)/APFD(c) CH

ACCESSION NR: AP4047157

S/0033/64/041/005/0037/0211

AUTHOR: Gnev'yashhev, M. N.; B. I. Sazonov

BS

TITLE: Influence of solar activity on processes in the earth's lower atmosphere

SOURCE: Astronomicheskiy zhurnal, v. 41, no. 5, 1964, 937-941

TOPIC TAGS: solar activity, lower atmosphere, solar corpuscular radiation, pressure formation, corona, meteorology

ABSTRACT: The development of active processes on the sun is accompanied by the emission of solar ultraviolet radiation, corpuscular radiation and emission in the radio range. These radiations, upon reaching the earth's atmosphere, cause changes in it which are manifested most strongly in the upper layers of the atmosphere at heights greater than 60-70 km. Their influence on the lower atmosphere is less pronounced. The studies which have been made on this subject are contradictory in their conclusion, and some authors have concluded that solar activity has no effect on the lower atmosphere. The present authors attribute these negative conclusions to certain errors in approach: 1) an effort to find universal relationships in different geographic regions of the earth without taking into account the great complexity of tropospheric processes, which are highly dependent on the properties of the underlying surface, season, time of day, geographic

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position and initial conditions, causing the effect of solar activity to be manifested differently in different regions; 2) in most cases, these authors have used indices of solar activity (such as Wolf numbers or sunspot area) which are nonlinearly related to the values of the energy of that solar radiation which is of importance for processes in the earth's lower atmosphere. This article is essentially a synopsis of certain arguments which demonstrate the influence of solar activity on the lower atmosphere, presented earlier by the authors (B. I. Sazonov, Vy*sonny*ye barichesklye obrazovaniya v sovremennoi aktivnosti, Gidrometeoizdat, 1964; M. N. Gnevyshev, Astron zh., 40, 401-412, 1963). In the first of these studies, on the basis of an analysis of 12,000 high-level pressure charts of the northern hemisphere, Sazonov drew important conclusions concerning the occurrence of regions with the most frequent extreme deviations of pressure from the norm. It was found that the regions of maximum frequency of maximum pressure form a ring-like zone similar to the auroral zone; a similar ring-like zone is formed for extremely low pressure values. It was shown that with the passage of large spot groups across the sun's central meridian there is a pressure increase in the pressure formations of the first zone and a pressure decrease in the second. It is concluded that this is evidence that the agent stimulating the development of pressure formations in the stratosphere and upper troposphere is solar corpuscular radiation, whose distribution is determined by the earth's magnetic field. The reaction of the lower atmosphere will have a different sign, depending on the region. Although this region is defined clearly in the

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stratosphere and upper troposphere, it becomes much less clearly defined in the lower layers due to the influence of the thermal, mechanical and radiative peculiarities of the underlying surface. The essence of Gnevyshev's paper was that the behavior of the coronal line # 6303 demonstrates that solar activity is linked closely to changes in the earth's lower atmosphere. The distribution of pressure formations in the 11-year solar cycle has two maxima which coincide with the intensity maximum of the coronal line. The behavior of both the line and the pressure formations is determined by solar corpuscular radiation. Orig. art. has: 2 figures.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya, AN SSSR (Main Astronomical Observatory, AN SSSR); Glavnaya geofizicheskaya observatoriya imen A. I. Voevodova (Main Geophysical Observatory)

SUBMITTED: 10Apr64

ENCL: 00

SUB CODE: AA, ES

NO REF SOV: 004

OTHER: 000

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GNEVYSHEV, Mstislav Mikhaylovich; MIKHAYLOV, A. A., akademik, otv.
red.;

[Kislovodsk Mountain Astronomical Observatory] Kislovodskaina
gornaya astronomichskaia stantsiia. Moscow, Nauka, 1965.
47 p. (MIRA 18:8)

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UR/0030/65/000/005/0067/0071

ACCESSION NR: AP5014801

AUTHOR: Gnevyshev, M. N. (Candidate of physicomathematical sciences) 33TITLE: New data on solar activity and its influence on the earth 3C

SOURCE: AN SSSR. Vestnik, no. 5, 1965, 67-71 E

TOPIC TAGS: solar activity, solar terrestrial relation, solar cycle, sunspot, biastronautics, coronal emission

ABSTRACT: On the basis of coronal investigations conducted at the Biulgovsk Mountain Station of the Main Astronomical Observatory of the Academy of Sciences USSR during the IGY, IGC, and IQSY, it has been established that the normal 11-year solar cycle has two, essentially different, maxima. During the period of the first maximum the intensity of coronal radiation increases uniformly over the entire solar disk, showing maximal intensity at a solar latitude of about 25° . As the first maximum diminishes, a second maximum appears in the equatorial region, exhibiting maximal intensity at a solar latitude of about 10° . Even though the second maximum is restricted to the equatorial region, it involves the same amount of radiation as the first maximum. The establishment of the double activity maxima in the 11-year solar cycle clarifies certain discrepancies noted in correlating

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